

# Environment plans for offshore petroleum

Operator and titleholder workshop  
7 March 2012



# Agenda

**Welcome and introduction**

Jane Cutler  
CEO, NOPSEMA

**APPEA opening statement**

Miranda Taylor  
APPEA

**Environment regulation – key principles**

Cameron Grebe  
GM Environment, NOPSEMA

**Environment plan content – key planning components**

Karl Heiden  
Manager Environment Assessment and Compliance, NOPSEMA

**Question & Answer**

**NOPSEMA**

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**Facilitated workshop session**

Francis Baronie  
Workshop facilitator

**APPEA next steps**

**APPEA**



# Welcome and introduction

Jane Cutler



# APPEA opening statement

Miranda Taylor



# Environment regulation – key principles

Cameron Grebe

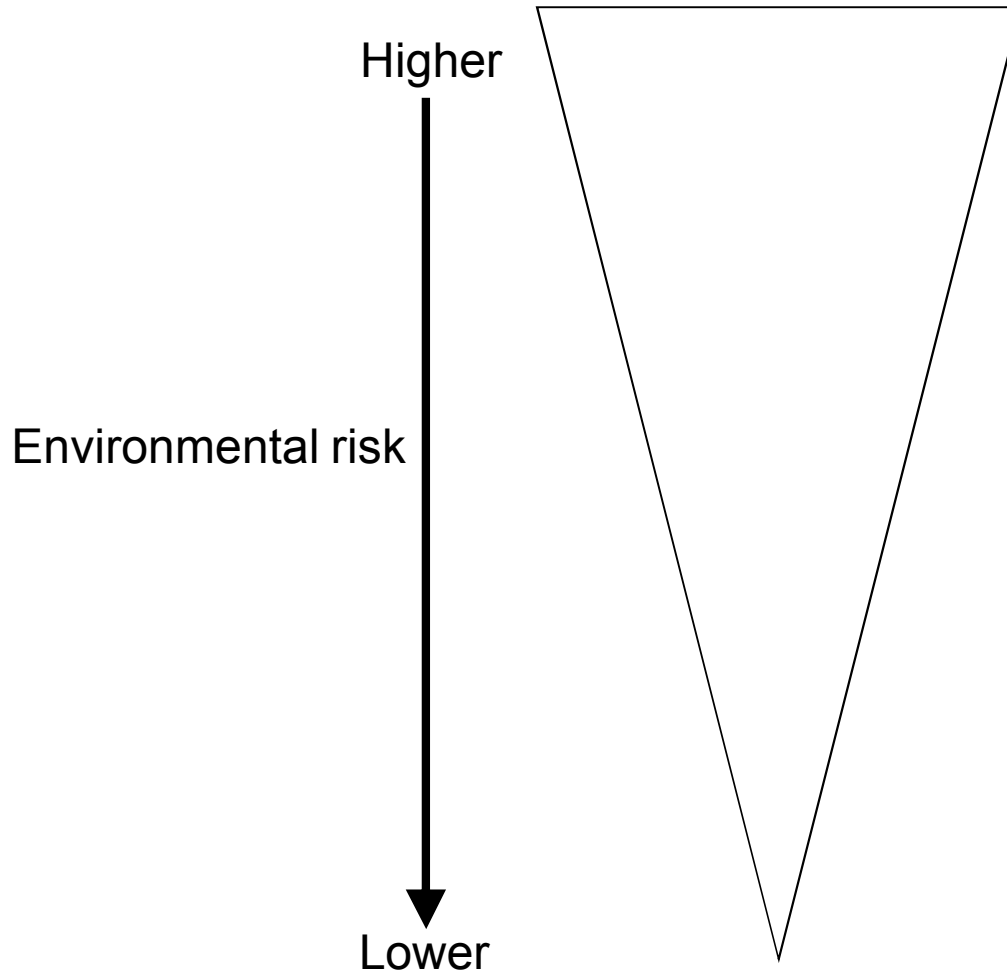


# acceptability criteria

- (1) The Regulator must accept the environment plan if there are reasonable grounds for believing that the plan:
  - a) is **appropriate for the nature and scale of the activity** or proposed use; and
  - b) **demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable**; and
  - c) **demonstrates that the environmental impacts and risks of the activity will be of an acceptable level**; and
  - d) provides for **appropriate environmental performance objectives, environmental performance standards and measurement criteria**; and
  - e) includes an **appropriate implementation strategy and monitoring, recording and reporting arrangements**; and
  - f) for the requirement mentioned in paragraph 16 (b) — demonstrates that:
    - i. the **operator has carried out the consultations required** by Division 2.2A; and
    - ii. the **measures (if any) that the operator has adopted, or proposes to adopt, because of the consultations are appropriate**; and

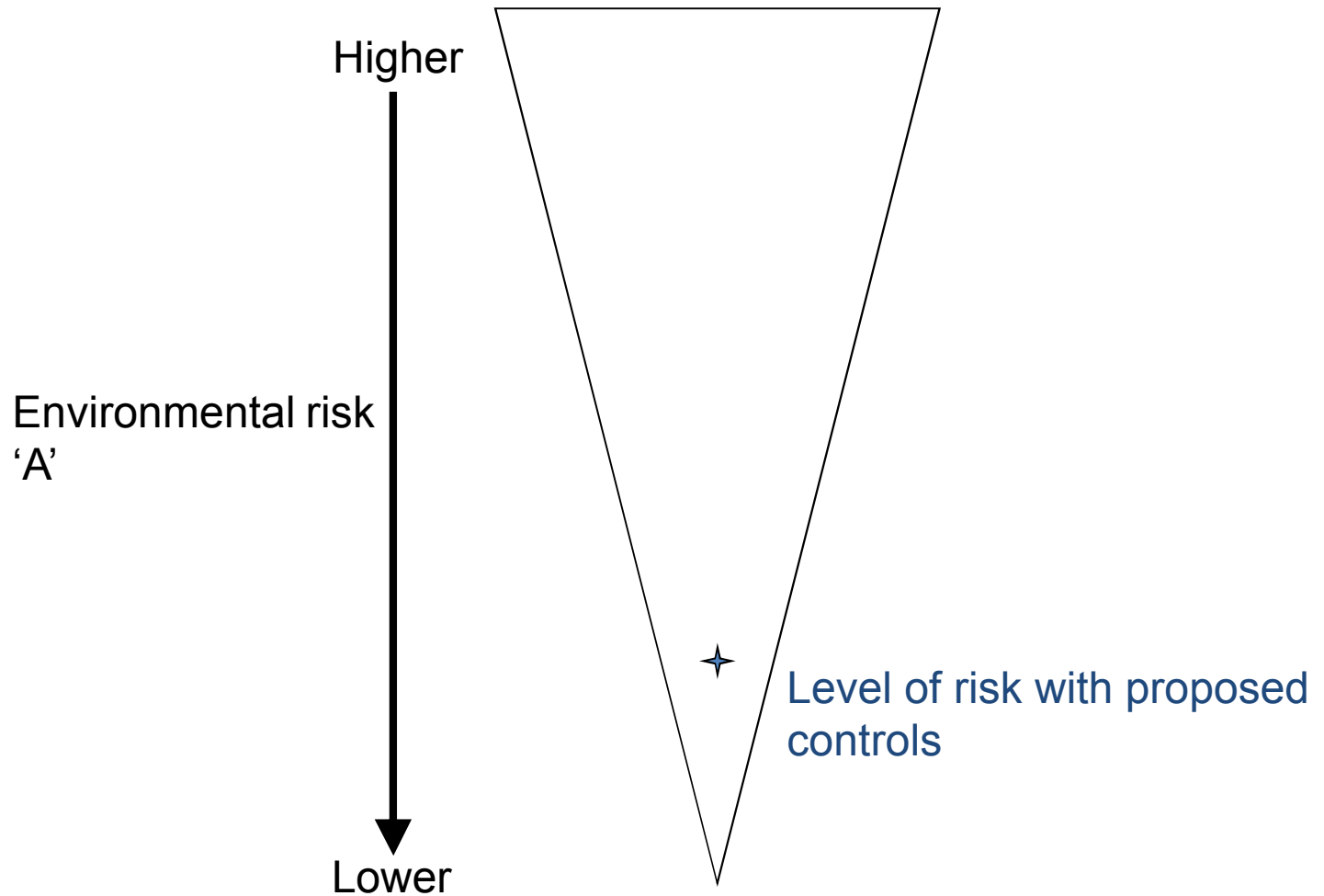


# Task of **operator** v. task of **regulator**: eg 'ALARP' and 'acceptable' demonstration



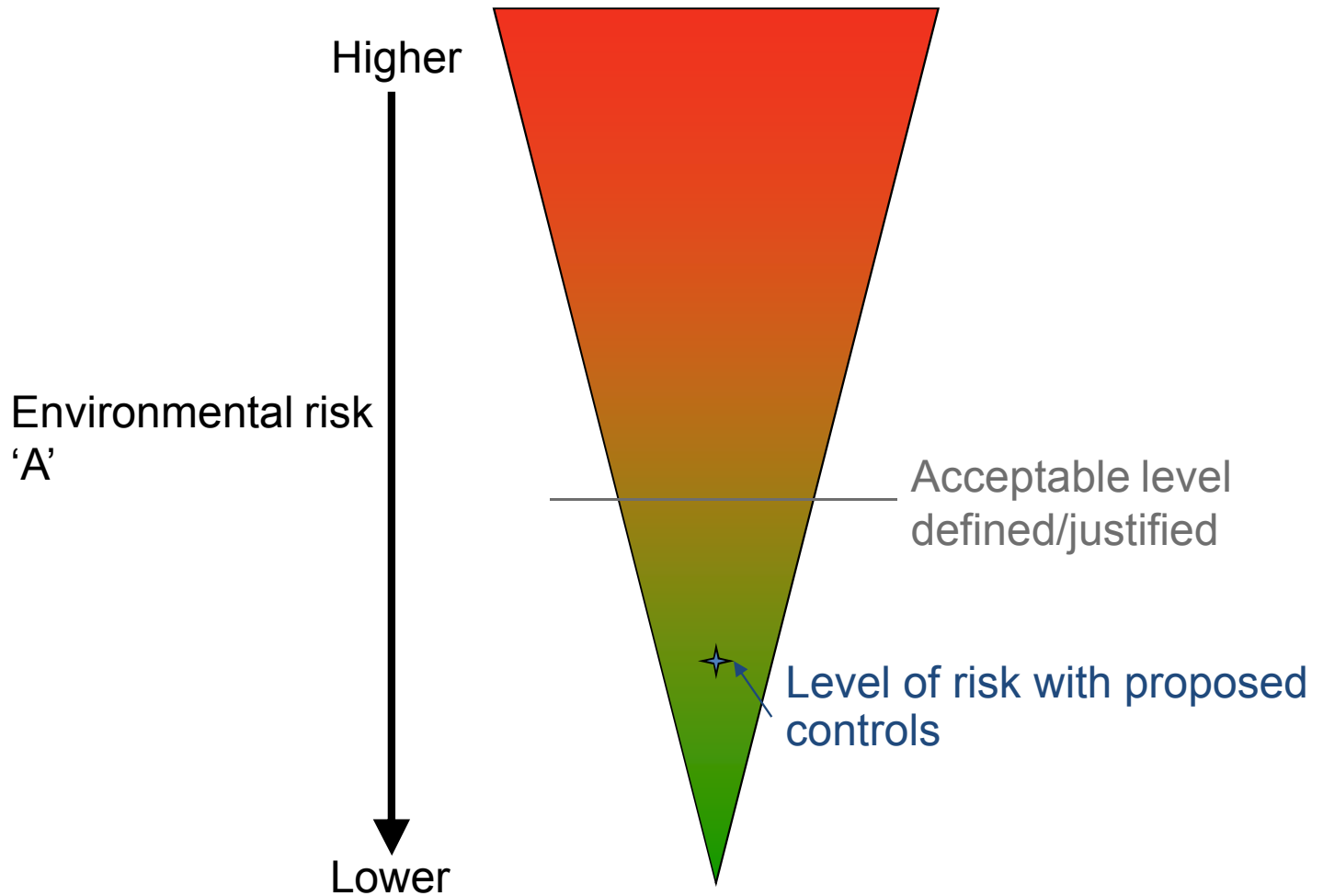


# Task of operator v. task of regulator: **operator** 'evaluate risks and impacts'



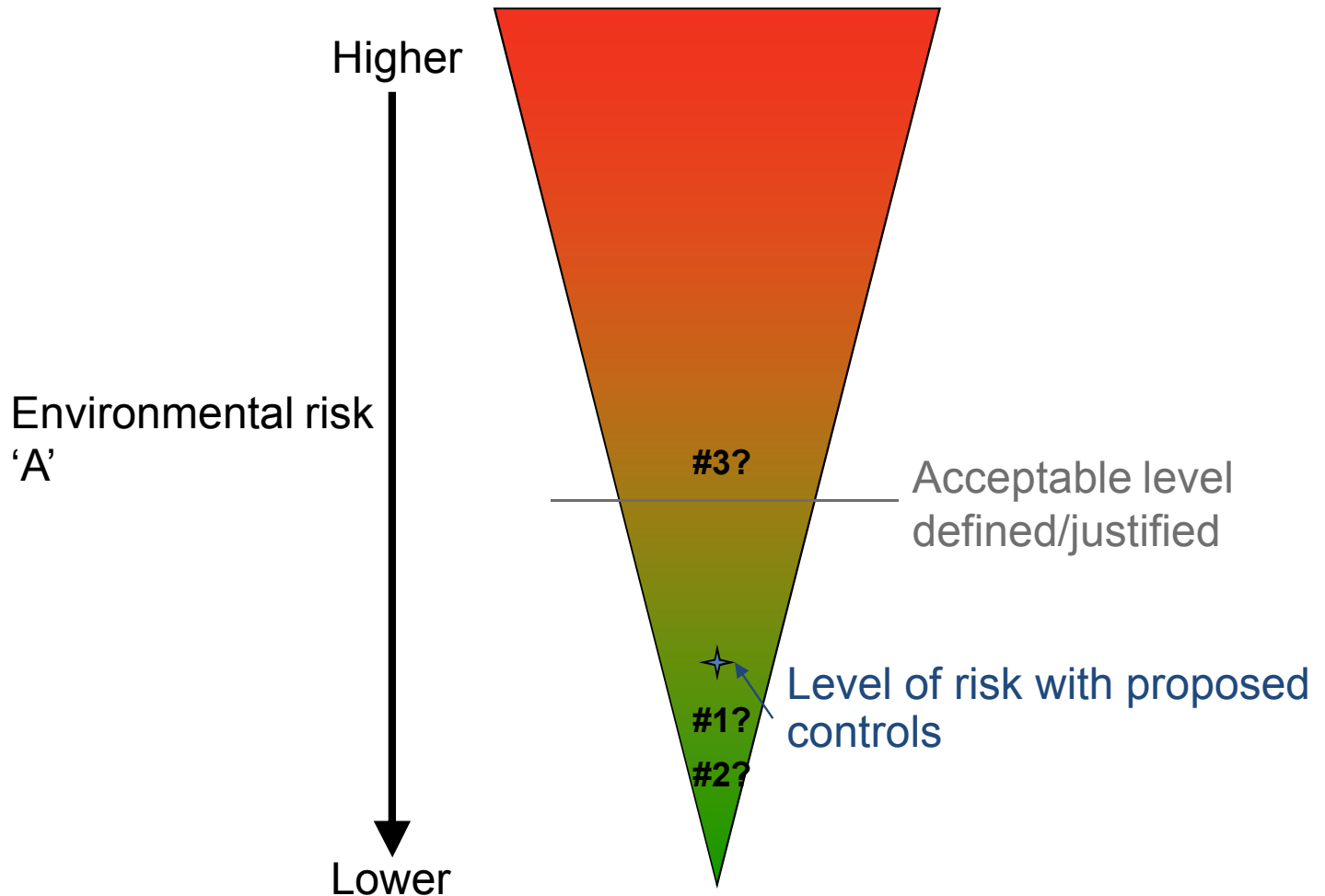


# Task of operator v. task of regulator: **operator** demonstrate acceptability



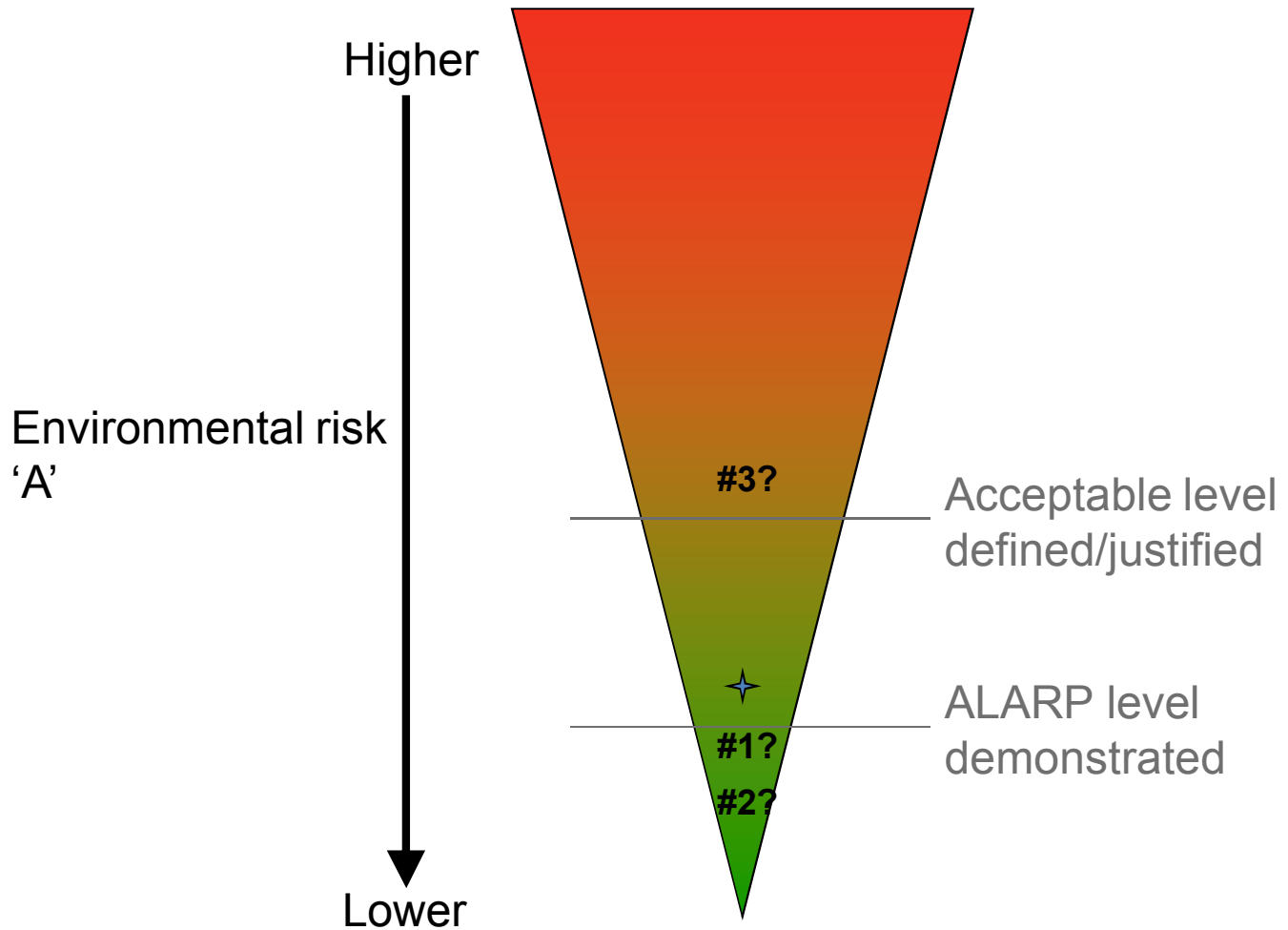


# Task of operator v. task of regulator: **operator** demonstrate ALARP



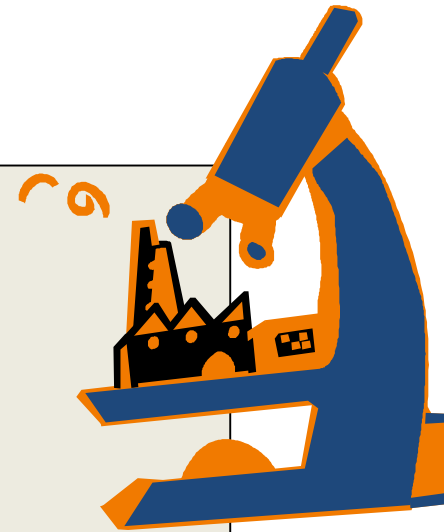
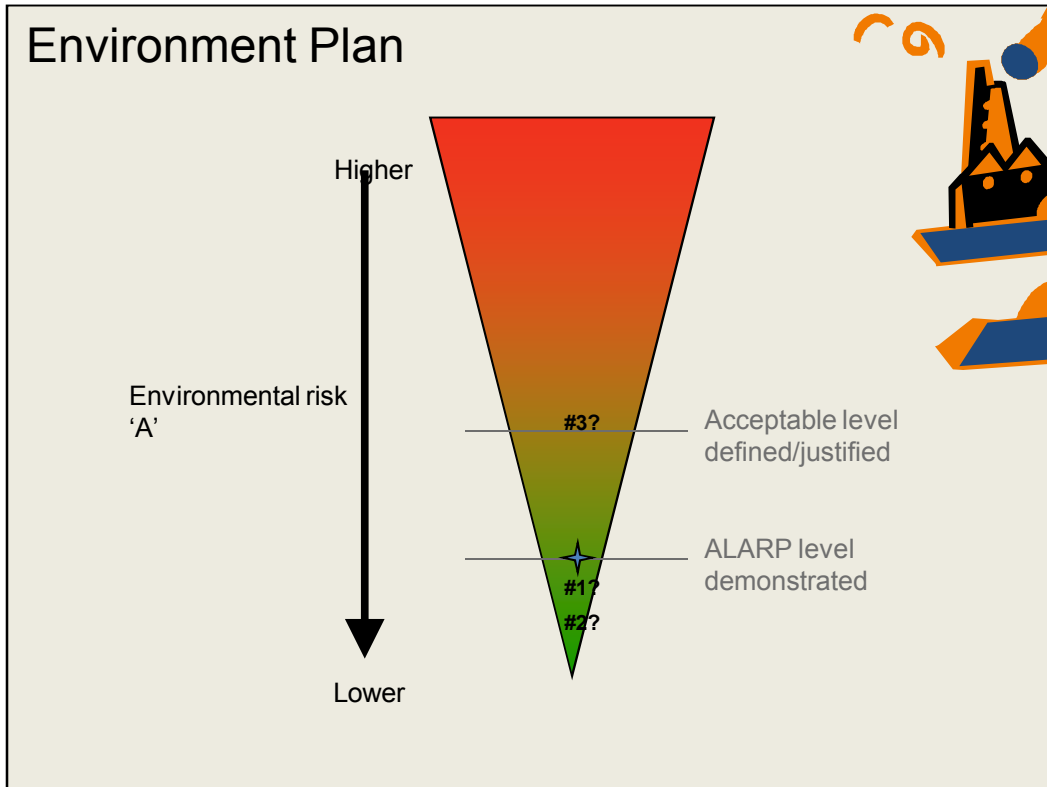


# Task of operator v. task of regulator: operator demonstrate ALARP





# Task of operator v. task of regulator: regulator assess operator's submission against criteria



Has the **operator** demonstrated they have done enough to manage the risk?



## Further advice and activities for 2012

- OSCP workshop 20 March 2012
- Melbourne workshop(s) – register
- Information session
  - Government agency
  - Other non-operator stakeholders
- Other APPEA workshops?
- Ongoing operator liaison (phone, email, meeting)
- Further NOPSEMA guidance
- Environment regulations review (RET)



# Environment plan content – key planning components

Karl Heiden



# Overview\*

Submissions Received	24
Transferred from DAs	6
Acceptances	3
Refusals	1
Regulator response to Operator	
Regulation 11(2) – not reasonably satisfied	4
Regulation 10(1)(c) – unable to make a decision	14

\*as at 6 March 2012



# Key Areas

- Demonstration of ALARP
- Performance Objectives, Standards and Criteria
- Consultation





# Demonstration of ALARP Regulatory Requirements

- Acceptance Criteria
- Regulation 11(1)(b)
  - demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable
- Regulation 13(3)(a) & (b)
- Regulation 13(3A)(a) & (b)
- Regulation 14 (3)



# Demonstration of ALARP

## NOPSEMA Guidance

- Reasoned and supported arguments as to why and how a specific method/activity was selected
- The following approaches (or combinations there of) could be considered:
  - Comparative analysis of alternatives
    - Benchmark against good practice
    - Comparison with codes and standards
    - Scientific testing
  - Cost benefit analysis
  - Hierarchy of controls



# Demonstration of ALARP Example

- Food scraps to be generated in vessel galley during the seismic survey. Discharge of food scraps overboard is permissible under MARPOL, and good practice within the petroleum industry includes maceration of food scraps to <25 mm prior to discharge. The survey area is in deep open ocean waters where this small waste stream will disperse rapidly and widely.
- As an alternative, disposal of food scraps onshore would require storage on deck where there is limited space, dedicated containers and additional packaging, handling, transport, and transfer to a licensed landfill site located more than 50 km by road from the port. This is not considered to be practicable due to the time, costs and inconvenience involved and the environmental impacts associated with onshore disposal.



# Performance Objectives, Standards & Criteria

## Regulatory Requirements

- Object of Regulation
- Regulation 3(b)(i)
  - carried out in accordance with an EP that has appropriate environmental performance objectives and standards, and
- Regulation 3(b)(ii)
  - Measurement criteria for determining whether the objectives and standards have been met
- Acceptability Criteria
- Regulation 11(1)(d)
  - Provides for appropriate environmental performance objectives, environmental performance standards and measurement criteria



# Performance Objectives, Standards & Criteria

## NOPSEMA Guidance

- If an operator is unable to measure environmental performance, it will be difficult for you and the regulator to determine compliance.
- Performance Objectives should be
  - Specific, Measurable, Achievable, Relevant, Time based
- Performance Standards need to be appropriate and relevant
- Measurement criteria need to link back to Objectives



# Performance Objectives, Standards & Criteria

## NOPSEMA Guidance

Performance Objective Example	Principle
<p>Minimise spills to the marine environment</p>	<p>Specific?: No                      Measurable?: No                      Achievable?: Yes                      Relevant?: Yes                      Time based?: No</p>
<p>No unplanned releases of hydrocarbons or hazardous chemicals to the marine environment will occur during the drilling campaign</p>	<p>Specific?: Yes                      Measurable?: Yes                      Achievable?: Yes                      Relevant?: Yes                      Time based?: Yes</p>



# Performance Objectives, Standards & Criteria Examples

Objective	Standard	Criteria
Monitor discharge of drill cuttings and muds	Drilling Operation Environment Plan	Monitoring discharges using daily logs

Objective	Standard	Commitment	Criteria
Vessels will not anchor in the vicinity of the drill site unless in emergency	No specific standard set	Anchoring will only occur in the event of an emergency	Vessel position tracking data

The above examples do not meet the requirements of the Regulations for a number of reasons and are provided for illustrative purposes only



# Stakeholder Consultation Regulatory Requirements

- Acceptability Criteria
- Regulation 11 (f)

*for the requirement mentioned in paragraph 16 (b) — demonstrates that:*

- (i) the operator has carried out the consultations required by Division 2.2A; and*
- (ii) the measures (if any) that the operator has adopted, or proposes to adopt, because of the consultations are appropriate.*

- Regulation 14(9)
- Regulation 16(b)
- Regulation 11A (Division 2.2A)





# Stakeholder Consultation

## NOPSEMA Guidance

- Carry out and document stakeholder planning and consultation.
  - Identifying who is a ‘relevant person’
  - Sufficient information and time scale for informed consultation
  - Demonstrate how relevant feedback taken into account
- Document plan for future, ongoing engagement



# Stakeholder Consultation Example

- Demonstration of consultation with a third party spill response organisation is expected where the use of third party resources to combat a spill has been documented in the environment plan including oil spill contingency plan
- Writing to a stakeholder and stating that no response was received may not be appropriate, if no demonstration is provided to justify whether a response is required



# Questions & answers

NOPSEMA